Larry Hogan, Governor - Boyd Rutherford, Lt. Governor - Van Mitchell, Secretary

September 4, 2015

Public Health Preparedness and Situational Awareness Report: #2015:34 Reporting for the week ending 08/29/15 (MMWR Week #34)

CURRENT HOMELAND SECURITY THREAT LEVELS

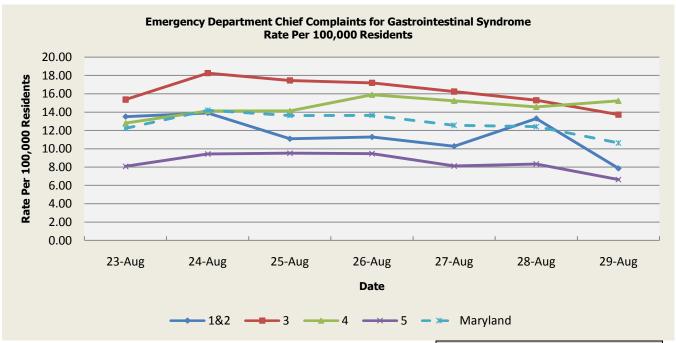
National: No Active Alerts

Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

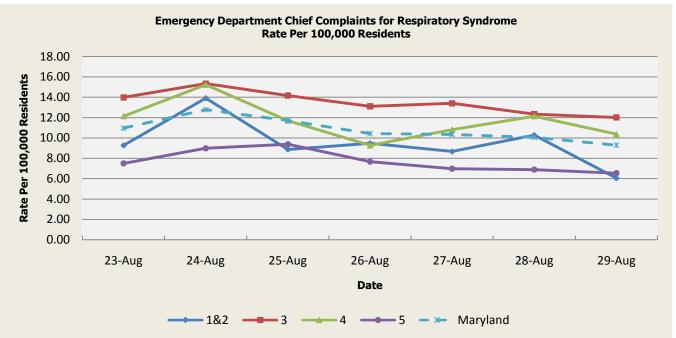
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There were no gastrointestinal illness outbreaks reported this week.

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2 3 4 5 Maryland								
Mean Rate*	12.93 14.33 15.28 10.11 12.67								
Median Rate*	12.91 14.10 14.57 10.00 12.52								

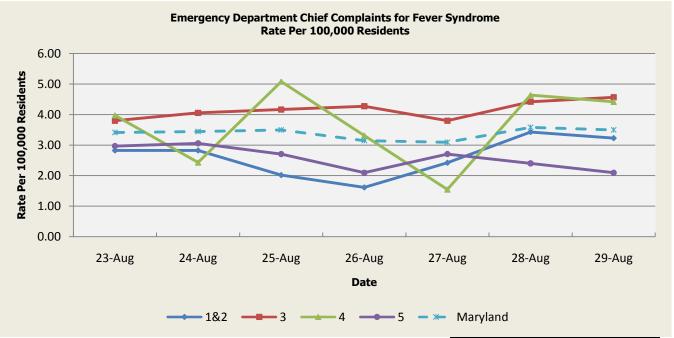
* Per 100,000 Residents



There was one respiratory outbreak reported this week: 1 outbreak of Legionellosis associated with a hospital (Region 3).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Marylan							
Mean Rate*	11.89 13.41 13.71 9.62 11.85							
Median Rate*	11.49 12.93 13.25 9.26 11.4							

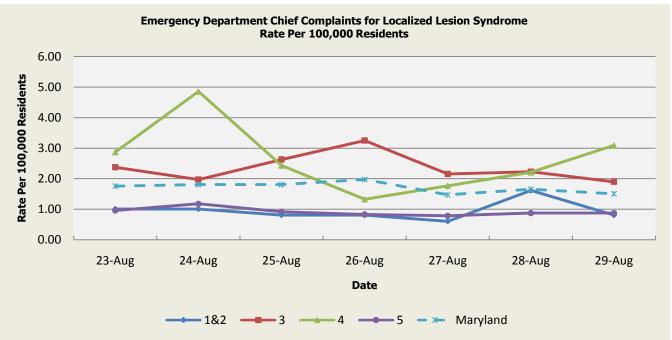
* Per 100,000 Residents



There were no fever outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2 3 4 5 Maryland								
Mean Rate*	3.12 3.66 3.88 3.04 3.39								
Median Rate*	3.02 3.51 3.75 2.92 3.26								

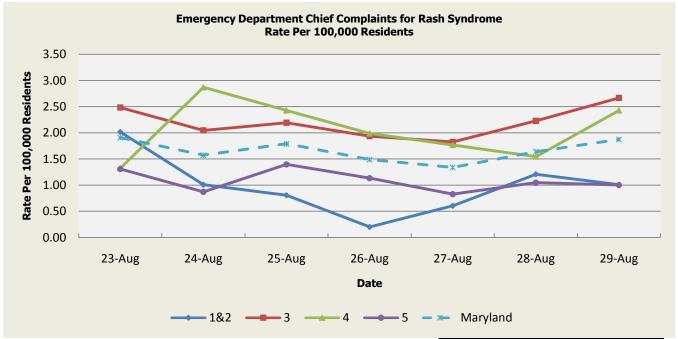
Per 100,000 Residents



There were no localized lesion outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Maryland							
Mean Rate*	1.10 1.92 2.05 1.00 1.5							
Median Rate*	1.01 1.86 1.99 0.96 1.46							

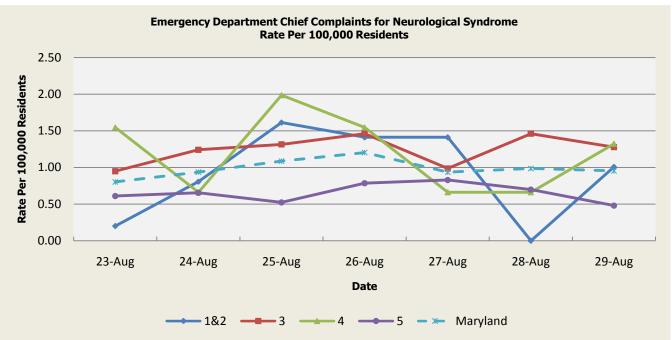
^{*} Per 100,000 Residents



There were two rash illness outbreaks reported this week: 2 outbreaks of scabies in nursing homes (Regions 3, 5).

	Rash Syndrome Baseline Data January 1, 2010 - Present									
Health Region	1&2 3 4 5 Maryland									
Mean Rate*	1.33 1.73 1.77 1.05 1.44									
Median Rate*	1.21	1.21 1.68 1.77 1.00 1.41								

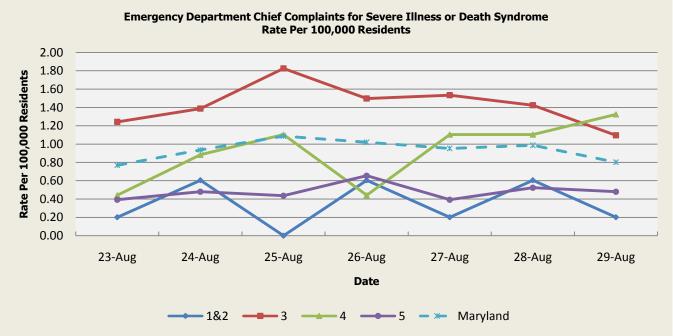
^{*} Per 100,000 Residents



There were no neurological outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present									
Health Region	1&2 3 4 5 Maryland									
Mean Rate*	0.62 0.67 0.62 0.45 0.57									
Median Rate*	0.60	0.60 0.62 0.66 0.44 0.54								

^{*} Per 100,000 Residents

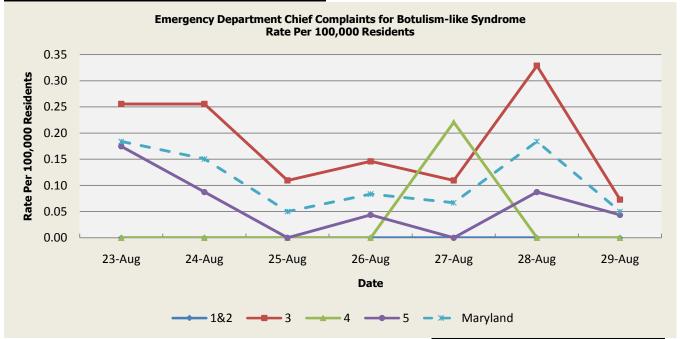


There were no severe illness or death outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Marylar							
Mean Rate*	0.74	0.96	0.88	0.42	0.73			
Median Rate*	0.60 0.95 0.88 0.39 0.72							

^{*} Per 100,000 Residents

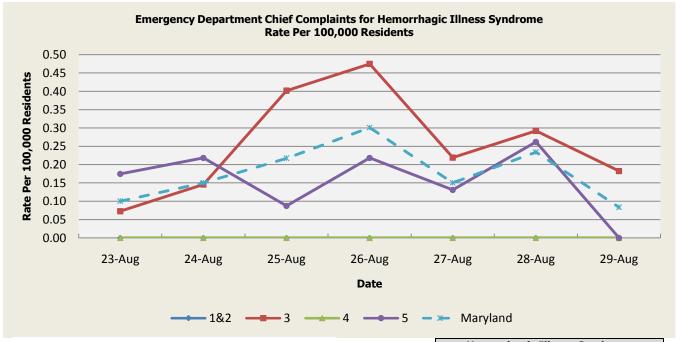
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 8/23 (Regions 3,5), 8/24 (Region 3), 8/26 (Region 3), 8/27 (Region 4), and 8/28 (Region 3). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present									
Health Region	1&2 3 4 5 Maryland									
Mean Rate*	0.06	0.06 0.06 0.04 0.04 0.05								
Median Rate*	0.00	0.04	0.00	0.04	0.03					

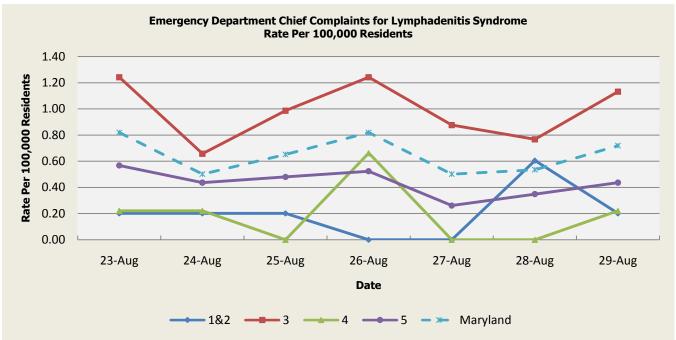
^{*} Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 8/23 (Region 5), 8/24 (Region 5), 8/25 (Region 3), 8/26 (Regions 3,5), 8/27 (Regions 3,5), 8/28 (Regions 3,5), and 8/29 (Region 3). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Marylan							
Mean Rate*	0.03 0.06 0.03 0.04 0.05							
Median Rate*	0.00 0.04 0.00 0.00 0.03							

^{*} Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 8/23 (Region 3), 8/25 (Region 3), 8/26 (Region 3), 8/27 (Region 3), 8/28 (Region 3), and 8/29 (Region 3). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Maryland							
Mean Rate*	0.31	0.37	0.34	0.25	0.32			
Median Rate*	0.20	0.30						

^{*} Per 100,000 Residents

MARYLAND REPORTABLE DISEASE SURVEILLANCE

	Counts of Reported Cases‡							
Condition		August		Cumulat	ive (Year to	Date)**		
Vaccine-Preventable Diseases	2015	Mean*	Median*	2015	Mean*	Median*		
Aseptic meningitis	50	49.2	48	293	276.6	301		
Meningococcal disease	1	0.6	0	2	5.2	5		
Measles	0	0	0	0	0.2	0		
Mumps	5	0.2	0	12	20.4	2		
Rubella	0	0.2	0	1	1.2	1		
Pertussis	2	24.4	24	58	128.6	124		
Foodborne Diseases	2015	Mean*	Median*	2015	Mean*	Median*		
Salmonellosis	67	131.8	131	514	642	635		
Shigellosis	13	18	16	140	110.6	94		
Campylobacteriosis	42	65.4	63	429	416.4	430		
Shiga toxin-producing Escherichia coli (STEC)	4	9	8	61	47	44		
Listeriosis	1	3	2	13	10.4	11		
Arboviral Diseases	2015	Mean*	Median*	2015	Mean*	Median*		
West Nile Fever	3	3	2	6	3.8	2		
Lyme Disease	34	96.2	95	777	920.8	924		
Emerging Infectious Diseases	2015	Mean*	Median*	2015	Mean*	Median*		
Chikungunya	2	1.6	0	14	5.6	0		
Dengue Fever	0	1.4	2	5	6	6		
Other	2015	Mean*	Median*	2015	Mean*	Median*		
Legionellosis	12	16.8	16	86	86.6	82		

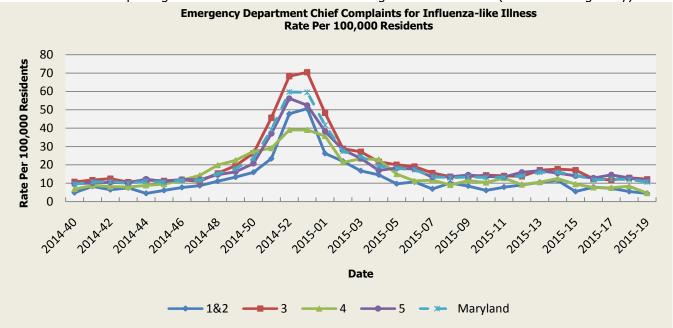
[‡] Counts are subject to change

^{*}Timeframe of 2009-2014

^{**}Includes January through August

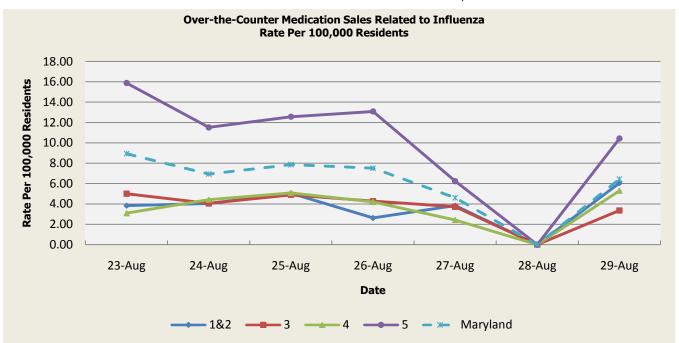
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 21 (October through May).



	Influenza-like Illness Baseline Data Week 1 2010 - Present									
Health Region	1&2 3 4 5 Maryland									
Mean Rate*	9.39 10.63 10.72 9.79 10.21									
Median Rate*	7.66	7.66 8.29 8.83 7.42 7.94								

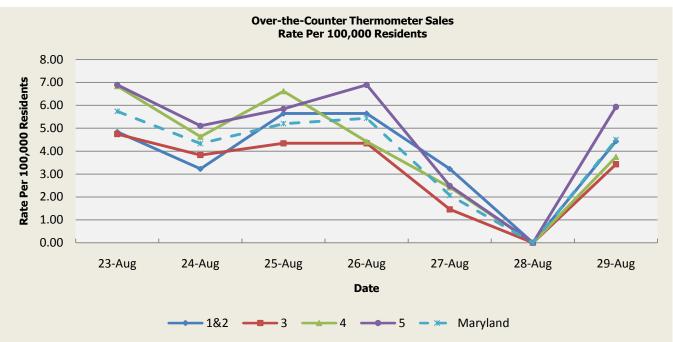
* Per 100,000 Residents



There was not an appreciable increase above baseline in the rate of OTC flu medication sales this week.

	OTC Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.36	6.03	3.03	13.76	8.71
Median Rate*	4.03	4.90	2.65	11.22	7.06

^{*} Per 100,000 Residents



There was not an appreciable increase above baseline in the rate of OTC thermometer sales this week.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	5.66	4.71	3.36	7.78	5.86
Median Rate*	5.04	4.35	3.09	7.16	5.42

^{*} Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a deescalation of activities towards those in the interpandemic phase may occur. As of <u>July 17, 2015</u>, the WHO-confirmed global total (2003-2015) of human cases of H5N1 avian influenza virus infection stands at 844, of which 449 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

Avian Influenza in Humans:

No avian influenza in humans reports this week.

There were no reports of human cases of avian influenza in the United States at the time that this report was compiled.

Avian Influenza in Poultry:

HPAI H5N2 (TAIWAN): 27 Aug 2015 Read More: http://www.promedmail.org/direct.php?id=3606508

NATIONAL DISEASE REPORTS

LEGIONELLOSIS (ILLINOIS): 3 Sep 2015 State veterans and health officials said in a statement on [Tue 1 Sep 2015], that 7 people have died and 32 sickened in a legionnaires' disease outbreak at a veterans home in Quincy, Illinois. The 7 residents who died had underlying medical conditions, the statement said, adding that results are pending from tests to determine whether other residents have contracted the disease. Read More: http://www.promedmail.org/direct.php?id=3620340

E.COLI EHEC (WASHINGTON): 3 Sep 2015 Seattle King County Public Health is currently investigating an outbreak of _E. coli_ O157 -- one of the most serious foodborne illnesses you can contract. Our thoughts are with the families affected by this outbreak, and we appreciate the support of the community as we work to protect the health of the public. Read More: http://www.promedmail.org/direct.php?id=3621342

WEST NILE VIRUS (MULTI-STATE): 1 Sep 2015 In a special telebriefing on West Nile virus (WNV) in the United States, Dr. Lyle Petersen, director of the Division of Vector-borne Infectious Diseases at the CDC, stated that we are "in the midst of 1 of the largest West Nile virus outbreaks ever seen in the United States." Read More: http://www.promedmail.org/direct.php?id=3616014

INTERNATIONAL DISEASE REPORTS

MERS-COV (SAUDI ARABIA): As of 02 Sep 2015, there have been a total of: 1,195 laboratory confirmed cases of MERS-CoV infection, including 510 deaths, 613 recoveries, and 72 currently active cases. Read More: http://www.promedmail.org/direct.php?id=3619530

EBOLA (MULTI-COUNTRY): 2 Sep 2015 Read More: http://www.promedmail.org/direct.php?id=3619530

LOUSE-BORNE RELAPSING FEVER (GERMANY): 2 Sep 2015 Since July 2015, 7 patients from Eastern Africa presenting with febrile disease to various health care facilities in Munich, Germany, were found to have visible spirochetes in the blood smear. Read More: http://www.promedmail.org/direct.php?id=3620174

INFLUENZA (AUSTRALIA): 26 Aug 2015 Queensland is on the brink of an influenza epidemic with thousands of cases diagnosed in August 2015, according to the Australian Medical Association Queensland. The latest Queensland Health figures show there have been more than 12 000 confirmed cases this year [2015] up until 16 Aug 2015. Read More: http://www.promedmail.org/direct.php?id=3612144

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the DHMH website: http://phpa.dhmh.maryland.gov/influenza/fluwatch/SitePages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.dhmh.md.gov/

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions	
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism	
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A	
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)	
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever	
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia	
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)	
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A	
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox	
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)	
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A	

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Pagions 1 & 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Region 3	Baltimore County		
Region 5	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

